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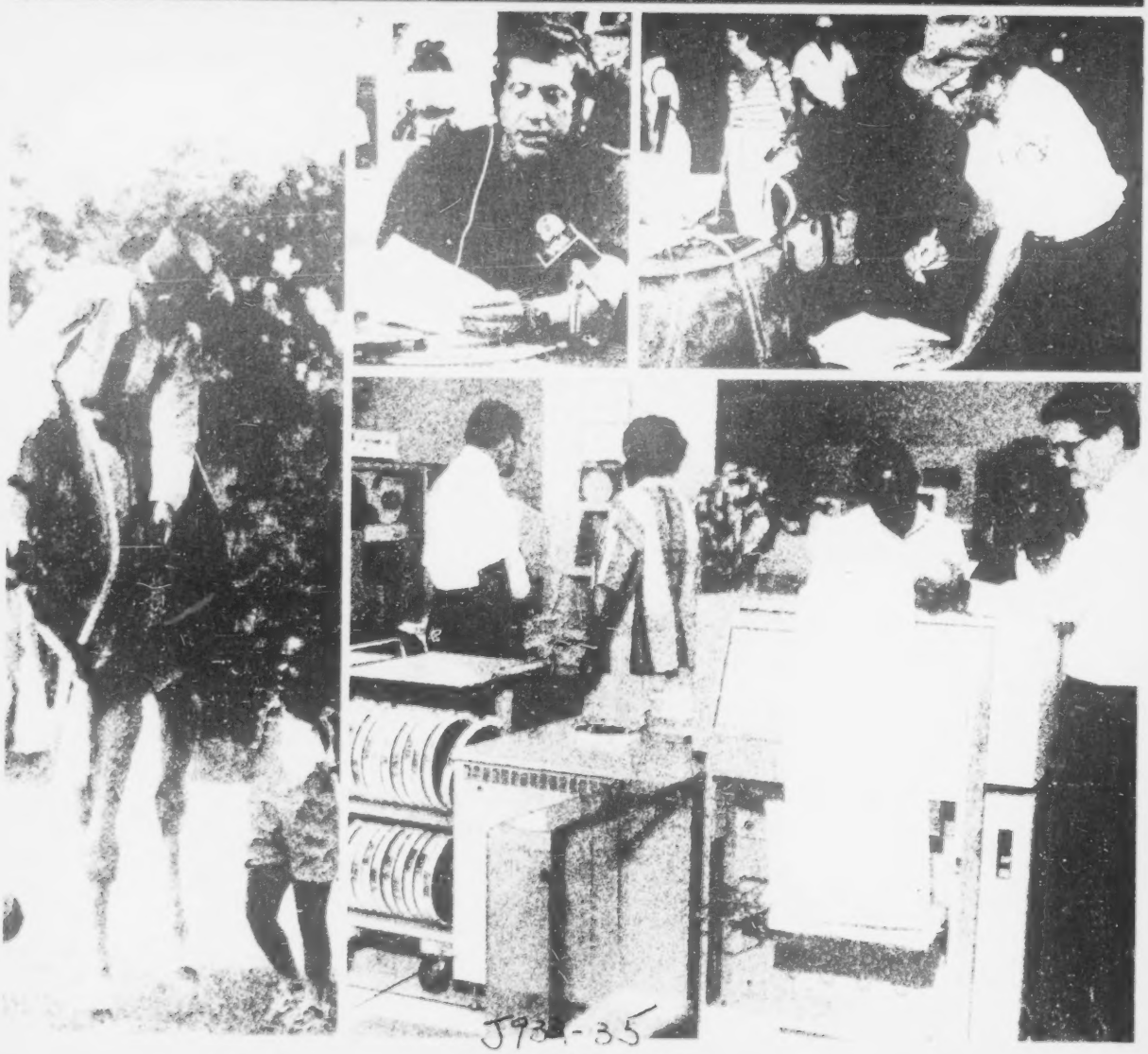
Federal Civilian Employment



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A SPECIAL STUDY

FEDERAL CIVILIAN EMPLOYMENT

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NOTES

Unless otherwise indicated, all years referred to in this report are fiscal years.

Details in the text and tables of this report may not add to totals because of rounding.

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PREFACE

Federal workers account for about 3 percent of civilian employment in the United States. This special study by the Congressional Budget Office (CBO) examines the characteristics of the federal work force and the changes it has experienced during the past decade. The report was prepared at the request of the House Committee on Post Office and Civil Service.

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December 1987

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SUMMARY

About 3 percent of all civilian employees in the United States work for the federal government--over 3 million in all. The federal civil service is diverse and complex. Its members represent more than 900 different occupations, over 100 different agencies direct their efforts, and roughly three dozen pay systems govern their wages and salaries. Despite its size and diversity, however, the federal civilian work force exhibits several dominant, defining characteristics. Three agencies, for example, account for more than two-thirds of all federal workers: the Department of Defense (DoD), the U.S. Postal Service (USPS), and the Veterans Administration (VA). The evolution of the federal work force over the past decade, moreover, has been marked by definite trends, and these trends often stand in clear contradiction to popular views about the civil service.

CHANGES IN THE SIZE OF THE CIVILIAN WORK FORCE

Current federal civilian employment is about 7 percent higher than the level of 2.85 million a decade ago (see Summary Table 1). By comparison,the growth of nonfederal civilian employment was far greater--about 25 percent over the same period. The U.S. civilian population also grew more. In 1977, each federal worker served 76 citizens; by 1987, that number was about 79.

While not insignificant, growth in the federal work force over the past decade does not correspond to the rapid expansion commonly perceived as always occurring in government. The 7 percent rise in federal jobs translates to an average annual increase of only about 0.7 percent, and the growth has not been universal. In fact, it was driven largely by the expansion at just two agencies--the Department of Defense and the U.S. Postal Service (see Summary Figure 1). Together these two agencies added more than 225,000 jobs, an increase of about 14 percent. At DoD, growth has occurred as part of the defense buildup. At the USPS, the increase represents in part a response to the growing demand for postal services. Outside of these two agencies,

the largest single increase in employment occurred at the Veterans Administration, where the growing health care and other needs of the aging veterans population led the Administration and the Congress to permit growth that added about 20,000 jobs--an increase of 9 percent.

Otherwise, federal employment has generally fallen, largely as a result of the Administration's efforts to reduce nondefense employment. The Administration imposed a freeze on federal hiring in 1981, and later lowered employment ceilings. At the same time, the Administration has promoted improvements in management as a way of bettering the delivery of federal services and holding the line on federal jobs. One of the largest single decreases in employment occurred

SUMMARY TABLE 1. FEDERAL CIVILIAN EMPLOYMENT, U.S. CIVILIAN POPULATION, AND U.S. CIVILIAN EMPLOYMENT, 1977-1987

	1977	1979	1981	1983	1985	1987 a/	Change 1977-1987 Number	Change 1977-1987 Percent
Federal Civilian Employment (In thousands)	2,854	2,897	2,910	2,878	3,001	3,050	196	7
Civilian Population (In millions)	217	222	227	232	236	241	23	11
U.S. Civilian Employment (In millions)	79	86	88	87	94	98	20	25

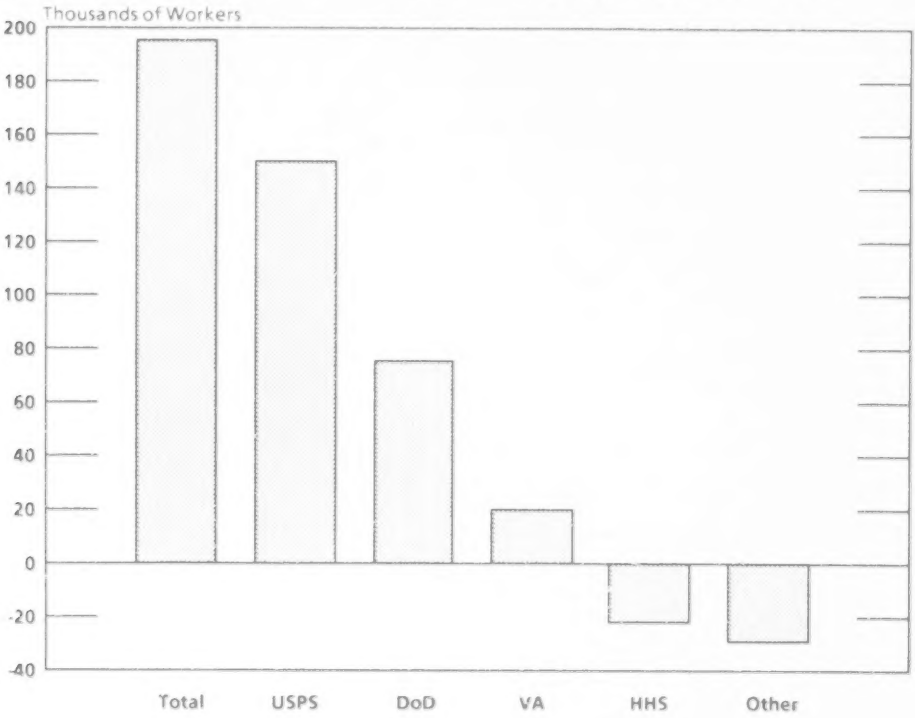
SOURCE: Congressional Budget Office from data provided by the Office of Personnel Management and the Departments of Labor and Commerce.

NOTE: Data represent annual averages of monthly totals. Averages for government cover permanent and temporary appointments as well as full-time, part-time, and other work schedules. All geographic areas are represented, as are all agencies except the Central Intelligence Agency and other intelligence-gathering organizations. Averages for U.S. civilian employment cover employees on nonfederal, nonagricultural payrolls.

a. Covers only October 1986 through May 1987.

at the Department of Health and Human Services (HHS), reflecting, among other things, the closing of underused public health facilities and the computerization of operations at the Social Security Administration. From 1977 through 1987, employment at HHS (including that of the Department of Education--the two were one agency until

Summary Figure 1.
Changes in Federal Civilian Employment by Agency, 1977-1987



SOURCE: Congressional Budget Office from data provided by the Office of Personnel Management.

NOTES: Data cover permanent and temporary appointments as well as full-time, part-time, and other work schedules. All geographic areas are included, as are all agencies except the Central Intelligence Agency and other intelligence-gathering organizations.

USPS = U.S. Postal Service; DoD = Department of Defense; VA = Veterans Administration; HHS = Department of Health and Human Services (with the Department of Education).

Data for fiscal year 1987 cover only the months of October 1986 through May 1987.

1980) fell by 22,000, or 14 percent. A drop of similar magnitude was experienced by the Department of Agriculture, mainly reflecting cutbacks in the Forest Service. (See Table A-1 in the Appendix for further detail on federal employment trends.)

COMPOSITION OF THE NONPOSTAL CIVILIAN WORK FORCE

About 80 percent of all federal civilian employees outside the Postal Service hold white-collar jobs such as secretary, accountant, and attorney (see Summary Table 2). About three-quarters of these workers

SUMMARY TABLE 2. EDUCATIONAL ATTAINMENT AND OCCUPATIONAL DISTRIBUTION OF FEDERAL CIVILIAN NONPOSTAL FULL-TIME PERMANENT WORKERS, MARCH 1976 AND MARCH 1986

Occupational Group	Percent of Work Force		Percent of Work Force With Bachelor's Degree or Better	
	1976	1986	1976	1986
White-Collar a/	76	80	32	38
Professional	16	18	85	88
Administrative	19	24	41	46
Technical, clerical	39	36	7	9
Blue-Collar	24	20	1	2
All Occupations b/	100	100	25	31

SOURCE: Congressional Budget Office from data provided by the Office of Personnel Management.

NOTE: Covers full-time permanent employment for all agencies but the U.S. Postal Service, the Tennessee Valley Authority, the Central Intelligence Agency, and certain other smaller agencies. Overseas employment included in the data is limited to U.S. citizens.

a. Includes workers in "other" white-collar occupations, a designation applied to guards, fire fighters, and similar jobs.

b. Includes workers in jobs for which an occupation was not specified when reported to the Office of Personnel Management. The number of such workers with a bachelor's degree or better fell by about 5,000 between 1976 and 1986.

hold jobs in occupations designated professional, administrative, or technical. The federal clerical work force represents only about 20 percent of all workers outside the Postal Service.

Over the past decade, as the problems with which government is asked to deal have become larger and more complex, the work force has shifted into more skilled professional and administrative jobs. In 1976, about 35 percent of all nonpostal workers held jobs with such designations, and by 1986 the figure had risen to about 42 percent.

Educational Attainment

As its concentration in higher-skilled occupations suggests, federal workers are well educated and have become increasingly so over the past decade. In 1976, about 25 percent of all nonpostal employees had earned a bachelor's degree or better; by 1986, the figure had risen to 31 percent (see Summary Table 2). The trend toward higher educational attainment holds regardless of the occupational group considered. Not unexpectedly, the professional occupations--such as nurse, accountant, biologist, and engineer--show the highest level of educational attainment. About 88 percent of workers in such jobs had earned a bachelor's degree or better as of 1986, up from 85 percent 10 years earlier. Even in technical and clerical jobs, however, about 45 percent of all workers have some college education, and about 9 percent have at least a bachelor's degree.

Length of Federal Service

The average length of service for the nonpostal civilian work force (including time served in the military) is 13.5 years, down slightly from 14.1 years in 1976. Among the factors that may have contributed to this decline is the growing role of women in the federal government. Women, who generally have shorter tenures than men, currently make up about 40 percent of all full-time nonpostal workers, up from 35 percent a decade ago. The recent jump in retirements may also have contributed to the drop in average service. Particularly noteworthy is the increase in retirements from the Senior Executive Service (SES), which is composed of the government's top managers. The rate of retirements from SES in 1986 was 6.1 percent, up from 4.6 per-

cent in 1985 and 3.8 percent in 1981. Although the SES is too small to affect overall statistics much, the recent increase in departures reinforces widespread concerns about the government's ability to retain experienced executives.

WHAT FEDERAL WORKERS DO AND HOW WELL THEY DO IT

To what missions does the government apply the skills of its large body of highly skilled workers? About 60 percent of all federal workers support just two federal activities--providing for the national defense and delivering the mail. Most of the remaining workers are divided almost evenly among five different activities: management of natural resources and transportation (engaging about 8 percent of all federal workers); administration of benefit payments to states and assistance to states and localities (7 percent); provision of health care to war veterans (7 percent); tax collection and other general government management (6 percent); and research and information activities (6 percent).

Data on productivity suggest that the federal work force has generally performed well in carrying out its various missions. Productivity refers to the efficiency with which resources are used. As measured by the Bureau of Labor Statistics (BLS), federal productivity represents the amount of goods or services produced with a given amount of labor. The productivity of a procurement operation, for example, may be measured as the number of contracts awarded per year of work. According to BLS data, federal productivity rose at an average annual rate of 1.4 percent from 1977 through 1986. At the Defense Department, annual productivity growth for the period averaged 1.2 percent, slightly below the performance of the government as a whole. In fact, productivity at DoD has actually declined in recent years. At the Postal Service, productivity has increased at an average annual rate of 1.2 percent since 1977. Growth in productivity for the rest of government was relatively strong over the period, averaging 2.0 percent per year.

The Administration has made growth in productivity a cornerstone of "Reform 88," its program to improve management. By an Executive Order issued in 1986, the Administration established a goal for annual productivity growth of 3 percent for selected activities. While that goal is well above the historical average for all agencies, labor productivity improvement for several broad government functions has reached or exceeded the standard in recent years. Nevertheless, as time passes, agencies may face a shrinking supply of activities that offer the kind of potential for productivity improvement necessary to sustain the program's target rate. Moreover, the Administration hopes to achieve 3 percent growth in measures of productivity that consider not only labor but also capital and other resources involved in production. Such measures often show less growth for the same effort than measures that consider only labor, such as those maintained by the Bureau of Labor Statistics.

Productivity, of course, is only one aspect of doing a job well. Data on productivity reveal nothing, for example, about the quality of government services. Problems of accuracy and timeliness, moreover, make BLS data difficult to use in decisionmaking at the program level. As an overall barometer of trends in efficiency, however, BLS data offer a fair measure. In this context, the productivity data reported here suggest a steady improvement in federal performance over time.

CHAPTER I

INTRODUCTION

The federal civil service, with its 3 million civilian employees, may be entering a new era in which recruiting and keeping qualified workers will become increasingly difficult. 1/ Factors commonly cited as contributing to this phenomenon include recent retirement reforms that lessen financial incentives to stay in government, widespread criticisms of the bureaucracy that reduce the perceived prestige of public service, and growing dissatisfaction with changes in federal personnel management under the Civil Service Reform Act of 1978. The limits placed on annual federal pay adjustments during the past decade may also be a factor.

In response to these and other concerns, proposals for reforming compensation and other personnel practices abound. Some proposals find their way into legislation considered by the Congress. 2/ At the same time, the Congress faces the continuing, and sometimes conflicting, need to economize in government programs and reduce federal deficits. Congressional deliberations on matters affecting the federal civil service may give rise to a number of questions--among them, what is the nature of the government's work force? 3/ In an effort to help answer this question, this Congressional Budget Office study:

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1. For a further discussion, see Charles H. Levine and Rosslyn S. Kleeman, "The Quiet Crises of the Civil Service: The Federal Personnel System at the Crossroads" (Occasional paper, National Academy of Public Administration, Washington, D.C., December 1986).

2. Legislation before the 100th Congress includes H.R. 386, which would provide for the testing of alternative systems of compensating federal workers; H.R. 2091 (S. 987 in the Senate), which would permit the Office of Personnel Management to set higher minimum pay rates for positions with which agencies have recruitment and retention problems; H.R. 2242, which proposes improvements in the awards program under which the government recognizes superior performance; and H.R. 2966 (S. 1545 in the Senate), which proposes a simplified pay and job classification system.

3. The analysis in this report is confined to the federal government's civilian employees. As of September 30, 1986, active-duty military personnel numbered 2.2 million.

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- Examines the size and composition of the federal civilian work force;
- Describes changes in the size and makeup of the work force over the past decade; and
- Considers how efficiently government employees do their job.

SIZE AND COMPOSITION OF THE FEDERAL CIVILIAN WORK FORCE

The federal civilian work force is large and diverse. For the first eight months of fiscal year 1987, federal employees numbered, on average, about 3 million--representing 3 percent of all civilian nonagricultural workers in the United States. (See accompanying box for a description of important differences in commonly used measures of the size of the federal work force.) Federal workers hold jobs in almost every major occupation. The Office of Personnel Management (OPM) reports federal employment in over 900 different occupations. More than 100 federal agencies direct the efforts of these workers, and more than three dozen pay systems determine their wages and salaries. Federal employees report to work in federal offices and facilities located throughout this country and overseas. As of May 1987, in fact, only about 11 percent of the federal work force was employed in the Washington, D.C., metropolitan area.

Despite its size and diversity, the work force exhibits certain prominent characteristics that shape and define it. About seven out of every ten federal employees, for example, work for one of just three agencies: the Department of Defense (DoD), the U.S. Postal Service (USPS), and the Veterans Administration (VA) (see Table 1). DoD remains the largest single employer, accounting for roughly one out of every three federal civilian employees. Other defining characteristics of the work force include its concentration in white-collar occupations; its large number of professionals, administrative personnel, and technicians; and its fairly high level of educational attainment.

BOX 1

MEASURING THE SIZE OF THE FEDERAL WORK FORCE

The reports and data bases on which the Congressional Budget Office (CBO) relied for the information used in this study cover varying portions of the civilian work force. Some reports, for example, cover only employees working a full-time schedule (usually 40 hours per week). Most work-force statistics, moreover, do not include information on the Central Intelligence Agency and other intelligence-gathering agencies. The Office of Personnel Management's Central Personnel Data File (CPDF), an automated system of individual records on federal civilian workers and the source of much of the data used in this report, does not cover the U.S. Postal Service, the Tennessee Valley Authority, and certain other smaller agencies. Also, its coverage of legislative and judicial branches is selective.

Just as coverage varies, so does the method used to calculate work-force totals. Much of the data presented in this report represents fiscal year averages of monthly employment counts from OPM's reports of federal civilian employment. In some cases, however, CBO relied on information representing a count of workers at a particular point in time. Other information is presented on a full-time equivalent (FTE) basis. Under this method, employment is translated to its comparable full-time value. For example, two half-time workers would count as one full-time equivalent. The FTE data used in this report, derived largely from budget documents, incorporate the full-time equivalent of overtime and holiday work. Averages of monthly data and data on an FTE basis help correct for seasonal and other variations in employment levels.

Notes in the text and tables of this report contain information on both the coverage of data in the various analyses and the method used to calculate work-force totals.

The remainder of this section describes the occupational and other characteristics of the nonpostal civilian work force. Data limitations prevent a similar analysis of the postal work force. 4/

White-Collar Workers

Most federal civilian workers hold jobs in white-collar occupations such as secretary, attorney, and accountant. Outside the Postal Service, in fact, almost 80 percent of all federal workers hold such jobs (see Table 2). About three-quarters of these workers hold jobs in occupations designated professional, administrative, or technical--with

4. As a quasi-independent agency, the U.S. Postal Service does not report the work-force statistics that other agencies do. Wholly apart from data limitations, however, the unique character of the Postal Service argues for considering the nature of the federal work force outside the agency. In contrast to much of the rest of government, for example, the postal work force is heavily clerical. In addition, the Postal Service operates largely independently of the rest of government. Pay for postal workers is determined by collective bargaining rather than by actions of the President and the Congress. Unlike most other agencies, moreover, the Postal Service finances its operations primarily from fees charged to users of its services rather than from tax revenues. Finally, annual Congressional review of the agency's resources is limited largely to certain relatively small appropriations that support reduced postage rates for selected mailers.

TABLE 1. FEDERAL CIVILIAN EMPLOYMENT, 1987

Branch, Department, Agency	Thousands of Workers	Percent of Total
Legislative and Judicial Branches	56	2
Executive Branch	2,994	98
Department of Defense	1,072	35
U.S. Postal Service	811	27
Other Executive Branch	1,111	36
Veterans Administration	243	8
Treasury	146	5
Health and Human Services	131	4
All other agencies	591	19
Total	3,050	100

SOURCE: Congressional Budget Office from data provided by the Office of Personnel Management.

NOTE: Data are averages of employment counts for the months October 1986 through May 1987. Averages cover both permanent and temporary appointments as well as full-time, part-time, and other work schedules. All geographic areas are represented, as are all agencies except the Central Intelligence Agency and other intelligence-gathering organizations.

administrative being the single largest group. 5/ Among the larger job categories in these occupational groups are engineering and engineering support (about 10 percent of all white-collar workers); nurse and medical technician (about 6 percent of total); and computer specialist (about 3 percent of total). Just under 20 percent of all federal workers hold clerical jobs.

Blue-Collar Workers

Workers in blue-collar occupations--such as plumbers, electricians, and carpenters--make up a smaller share of the federal work force. As

5. While administrative jobs together make up the largest occupational group, this should not be interpreted to mean that most federal workers are managers or supervisors. According to OPM data, only about 2 percent of full-time, white-collar federal civilian workers held managerial positions as of October 1985, and 11 percent held supervisory jobs. The OPM defines a manager as a federal employee to whom supervisory personnel report. Supervisors are defined as employees who are accountable to management for the quality and quantity of work performed and for assuring efficient operations.

of March 1986, employment in blue-collar jobs made up 20 percent of nonpostal federal employment. Two agencies, the Department of Defense and the Veterans Administration, employ the vast majority of these workers. The Office of Personnel Management reports employment for more than 475 different blue-collar occupations. The largest blue-collar occupational groups include warehouse and custodial services (representing about 10 percent of total blue-collar employment); electronics, aircraft, sheet metal, and mobile equipment repair (about 14 percent); and food services and general laboring (about 6 percent).

EDUCATIONAL ATTAINMENT

As its concentration in professional white-collar occupations might suggest, the federal work force is well educated. About 31 percent of all federal civilian employees, excluding postal workers, have earned

TABLE 2. FEDERAL CIVILIAN NONPOSTAL FULL-TIME PERMANENT WORK FORCE BY OCCUPATIONAL CATEGORY, MARCH 1986

Occupational Category	Number (In thousands)	Percent of Total
White-Collar	1,482	80
Professional	337	18
Administrative	447	24
Technical	314	17
Clerical	346	19
Other	39	2
Blue-Collar	366	20
Unspecified	2	a/
Total	1,851	100

SOURCE: Congressional Budget Office data provided by the Office of Personnel Management.

NOTE: Data cover full-time employees with permanent appointments only. Major executive branch agencies not reporting such information are the U.S. Postal Service, the Tennessee Valley Authority, and the Central Intelligence Agency. Coverage of legislative and judicial branches is limited to major agencies. Overseas employment included in the data is limited to U.S. citizens.

a. Less than one-half of 1 percent.

TABLE 3. DISTRIBUTION OF THE FEDERAL CIVILIAN NONPOSTAL FULL-TIME PERMANENT WORK FORCE BY EDUCATIONAL ATTAINMENT AND OCCUPATIONAL CATEGORY, MARCH 1986 (In percents)

Highest Level Completed	Occupational Group					
	Professional	Administrative	Technical/ Clerical	White-Collar a/	Blue-Collar	All Groups b/
High School or Less	6	25	55	35	75	43
Associate Degree or Some College	6	29	36	27	23	26
Bachelor's Degree, Post-Bachelor's Work, or Master's Degree	69	43	9	33	2	27
Post-Master's Work or Ph.D.	19	3	c/	5	c/	4
All Levels	100	100	100	100	100	100

SOURCE: Congressional Budget Office from data provided by the Office of Personnel Management.

NOTE: Table covers full-time permanent employment for all agencies but the U.S. Postal Service, the Tennessee Valley Authority, the Central Intelligence Agency, and certain other smaller agencies. Overseas employment included in the data is limited to U.S. citizens.

a. Covers all white-collar workers including workers in "other" white-collar occupations, a designation applying to guards, fire fighters, and other jobs.

b. Includes about 2,300 workers in jobs for which an occupation was not specified when reported to the Office of Personnel Management.

c. Less than one-half of 1 percent.

a bachelor's degree or better (see Table 3). The figure compares favorably with data showing 26 percent of the U.S. civilian nonfarm labor force having completed four years or more of college. 6/ For federal white-collar workers, the portion with such credentials is even higher, standing at 38 percent. For professional occupations, the comparable figure reaches 88 percent. But even in technical and clerical occupations, about 45 percent of all workers have some college education, and 9 percent have earned a bachelor's degree or better.

6. Differences in data collection make precise comparisons difficult. Private-sector data cover employed civilians age 25 years and older as of March 1986 (unpublished data from the Bureau of Labor Statistics).

CHAPTER II

TRENDS IN THE FEDERAL CIVILIAN WORK FORCE

Over the past decade, the federal civilian work force has experienced relatively modest changes in size but rather significant changes in other characteristics, most notably occupational mix and expertise. The trend has been toward a more white-collar, better educated, and more professional work force.

GROWTH OF THE FEDERAL WORK FORCE

From 1977 through the first eight months of fiscal year 1987, federal civilian employment grew by about 7 percent, from 2.85 million to 3.05 million--an average annual increase of about 0.7 percent (see Figure 1). 1/ Several observations help put this growth into perspective.

First, the rate of growth for the federal work force was exceeded by the growth of both the U.S. labor force and the nation's population--the federal work force's main client. From 1977 through May 1987, when federal civilian employment grew by 7 percent, nonfederal civilian employment in the nation grew by about 25 percent (see Table 4). Over the same period, the U.S. population grew by almost 11 percent. Measured another way, the number of citizens served by each federal employee rose from about 76 in 1977 to almost 79 by 1987. 2/

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1. In contrast to the modest increases in federal employment, federal expenditures (as measured by outlays) more than doubled from 1977 through 1987. This seeming contradiction is largely explained by the fact that the strongest growth in federal spending has occurred for items where the amount spent bears little direct relationship to the federal employment involved. Automatic cost-of-living adjustments, for example, have substantially increased government spending for Social Security and other entitlements. But issuing bigger benefit checks does not necessarily require greater human effort. In the same way, growing interest payments on the federal debt do not necessarily require more federal workers. Increased federal procurement has also helped keep federal employment down relative to federal spending.

2. Data on U.S. nonfederal employment was obtained from the Bureau of Labor Statistics. Data on U.S. population was obtained from the Bureau of the Census. Calculations are based on annual averages of monthly data.

Second, the growth in the number of part-time and temporary workers alone accounts for about one-fifth of the overall increase in federal employment. In 1977, temporary and part-time workers numbered about 417,000; in 1987, they number about 454,000. The 9 percent overall increase for these workers compares with 7 percent for the federal work force as a whole. The growth of the work force with nonpermanent appointments reflects, in part, recent efforts by OPM to encourage agencies (other than the Postal Service) to depend more on

Figure 1.
Growth of Federal Civilian Employment, 1977-1987

SOURCE: Congressional Budget Office from information provided by the Office of Personnel Management.

NOTE: Data represent annual averages of monthly data. Averages for "total" cover permanent and temporary appointments as well as full-time, part-time, and other work schedules. All geographic areas are represented, as are all agencies except the Central Intelligence Agency and other intelligence-gathering organizations.

Data for fiscal year 1987 cover only the months of October 1986 through May 1987.

TABLE 4. FEDERAL CIVILIAN EMPLOYMENT BY BRANCH AND AGENCY, 1977-1987 (Compared with nonfederal civilian population and employment)

	Number of Workers						Change 1977-1987	
	1977	1979	1981	1983	1985	1987 a/	Number	Percent
Federal (In thousands)								
Legislative and Judicial Branches	52	53	55	56	57	56	5	9
Executive Branch	2,803	2,844	2,855	2,823	2,944	2,994	191	7
Defense	997	974	986	1,033	1,080	1,072	76	8
Postal Service	660	661	664	664	734	811	150	23
Other Agencies	1,146	1,209	1,205	1,126	1,130	1,111	-35	-3
Total Federal	2,854	2,897	2,910	2,878	3,001	3,050	196	7
Nonfederal (In millions)								
Civilian Population	217	222	227	232	236	241	23	11
U.S. Civilian Employment	79	86	88	87	94	98	20	25

SOURCE: Congressional Budget Office from data provided by the Office of Personnel Management and the Departments of Labor and Commerce.

NOTE: Data represent annual averages of monthly totals. Averages for government cover permanent and temporary appointments as well as full-time, part-time, and other work schedules. All geographic areas are represented, as are all agencies except the Central Intelligence Agency and other intelligence-gathering organizations. Averages for U.S. civilian employment cover employees on nonfederal, nonagricultural payrolls.

a. Covers only October 1986 through May 1987.

temporary workers. Such workers cost less than permanent staff because they are not covered by retirement and other benefit programs. They also allow managers greater flexibility in responding to changes in both work load and budgetary resources. 3/

3. In 1985, under Federal Personnel Letter 316-21, OPM granted agencies expanded authority to make and extend temporary federal appointments. Not all agencies, however, have experienced growth in their temporary work forces. From 1985 through 1986, declines were experienced by a number of large agencies including the Departments of Agriculture, Interior, and Health and Human Services. For further discussion of this subject, see General Accounting Office, *Federal Workforce: New Authority to Make and Extend Temporary Appointments* (July 1986).

Finally, the increase in government employment was driven by expansion at just two agencies--the Department of Defense and the Postal Service (see Table 4 and the Appendix Table). (In addition, employment increased temporarily between 1979 and 1981 as a result of hiring by the Department of Commerce for the Decennial Census.) Employment at other agencies actually fell slightly over the decade, by about 3 percent. Within this group of nonpostal, nondefense agencies, however, one finds patterns of both growth and decline.

The USPS and DoD

The increase in employment at the USPS of 150,000 workers represents the largest growth experienced by an agency over the past decade. Most of the growth at the Postal Service occurred after 1983 and was preceded by a period of relative stability in postal employment. Employment increases at USPS in part represent a response to the growing demand for postal services. For example, mail volume, one important indicator of demand for services, grew by about 70 percent between 1977 and 1987--from 92 billion pieces of mail to 158 billion pieces. Employment at DoD, by contrast, grew steadily only after a period of decline that continued through 1980. Growth thereafter, which resulted in a net increase in employment at the agency of about 76,000, accompanied the Administration's defense buildup.

Historical data on federal employment alone, at DoD or any other agency, fail to give a complete picture of changes in the work force engaged in federal work. Some analysts suggest that estimates of the federal work force should include some portion of the workers in local governments, private firms, and other nonfederal organizations through which the government conducts many of its activities. The federal government enlists the support of these organizations through its loan and grant-in-aid programs and through contracts it lets for goods and services. While information is very sketchy regarding the nonfederal government work force supporting federal activity, the limited data available begin to suggest its size. DoD, for example, estimates that in 1986 about 3 million workers in private firms were engaged, directly or indirectly, in defense-related work. 4/

4. From unpublished Department of Defense estimates prepared by the Office of the Assistant Secretary, Comptroller.

Other Federal Agencies

For other executive branch agencies as a group, employment fell by about 35,000, or 3 percent, over the last decade. This change is composed of employment increases totaling 53,000 for the Veterans Administration and the Departments of the Treasury and Justice, offset by net decreases of 88,000, or 12 percent, for other agencies.

Several factors explain the general decline in employment among nondefense agencies. As a matter of national priorities, the current Administration has sought to deemphasize nondefense federal activity. As part of this effort, and despite the growing demand for many federal services, it has directed nondefense agencies to cut civilian employment as part of an overall effort to reduce government costs. In January 1981, the Administration imposed a hiring freeze on federal nondefense agencies. Later, employment ceilings for nondefense agencies were lowered and then lowered again. 5/ While agencies were able to achieve most of the reductions required by these actions by not filling vacant positions, in some cases employees were laid off.

In addition to pursuing direct reductions in employment, the Administration has promoted improvements in the management of federal operations as a means of enhancing the government's ability to deliver services while holding the line on federal jobs and federal spending. The management improvement effort, called Reform 88, was launched by the President in 1982 and encompasses a broad range of initiatives including installation of a comprehensive cash management system, improvements in productivity, and reform of procurement procedures. Nevertheless, employment has not decreased at every civilian agency. Where growth occurred--at the VA, for example--it was attributable to changing Administration priorities, Congressional mandates, or increased demand for government services.

At the Veterans Administration, employment was expanded by about 20,000, or 9 percent, to cope with the rise in demand for medical and other services that has accompanied the aging of veterans of

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5. The Office of Management and Budget controls federal civilian employment levels on an agency-by-agency basis by means of employment ceilings that specify the number of employees permitted on an agency's payroll. These ceilings are expressed on a full-time equivalent (FTE) basis. Postal Service employment by law is not subject to this control, and defense authorization acts traditionally exempt the Department of Defense from FTE ceilings.

World War II and the Korean War. 6/ At the Department of Justice, growth has resulted from decisions by the Administration and the Congress to expand efforts to control U.S. borders and to investigate and prosecute criminal cases involving drugs and white-collar crime. Employment grew at the department over the past decade by about 13,000, or 25 percent. Nearly all of the increases in employment experienced by the Treasury Department occurred in the Internal Revenue Service. After a period of a steady decrease in employment that continued through the early 1980s, actions by the Administration and the Congress increased employment at the agency to keep up with the growing number of tax returns filed and to strengthen efforts to increase compliance with tax laws. The net increase in employment at the Treasury over the past decade totals 19,000, or 15 percent.

The Department of Health and Human Services (HHS) is among the agencies that have experienced major decreases in employment over the past 10 years. The closing of underused public health facilities and the computerization of activities at the Social Security Administration contributed to the drop in jobs. Over the past decade, employment at HHS and the Department of Education fell by 22,000, or 14 percent. 7/ Other agencies contributing significantly to the drop in nondefense employment are the Department of Transportation (14,000, or 18 percent) and the Department of Agriculture (22,000, or 17 percent). At Transportation, employment fell following the firing of air traffic controllers in the summer of 1981. At Agriculture, a significant portion of the employment loss is accounted for by cutbacks in employment at the U.S. Forest Service.

THE CHANGING COMPOSITION OF THE NONPOSTAL FEDERAL CIVILIAN WORK FORCE

Because of the growing complexity of the problems with which government must contend, federal agencies have come to rely

6. For a discussion of the impact that the aging veterans' population will have on the health care provided by the Veterans Administration, see Congressional Budget Office, *Veterans Administration Health Care: Planning for Future Years* (April 1984).

7. The Department of Education was created by an act of Congress approved in October 1979. The functions of the two departments previously were performed by a single Department of Health, Education, and Welfare.

increasingly on more professional, better educated workers. In 1976, for example, only about 76 percent of the federal civilian nonpostal work force held white-collar jobs compared with 80 percent in 1986 (see Table 5). Moreover, white-collar workers holding jobs designated professional or administrative have increased from 35 percent of all workers to 42 percent. The particularly strong growth for administrative occupations was led by increases in the areas of computer operations, criminal investigations, and contracting. In contrast to the experience for professional and administrative jobs, clerical jobs fell as a portion of the work force, from 22 percent to 19 percent.

A combination of developments, often compounding in their effect, has contributed to the growth of the federal professional work force.

TABLE 5. FEDERAL CIVILIAN NONPOSTAL FULL-TIME PERMANENT WORK FORCE BY OCCUPATIONAL GROUP, MARCH 1976 AND MARCH 1986

Occupation	1976 (1.8 million workers)	1986 (1.9 million workers)
White-Collar	76	80
Professional	16	18
Administrative	19	24
Technical	17	17
Clerical	22	19
Other	2	2
Blue-Collar	24	20
All Occupations a/	100	100

SOURCE: Congressional Budget Office from data provided by the Office of Personnel Management.

NOTE: Figures cover full-time permanent employment for all agencies but the U.S. Postal Service, the Tennessee Valley Authority, the Central Intelligence Agency, and certain other smaller agencies. Overseas employment included in the data is limited to U.S. citizens.

a. Includes jobs that were not designated as white-collar or blue-collar.

The problems with which government must deal have increased not only in complexity but also in magnitude. The rise in demands for services often has required the response of professionals, as in the case of the growing demand for veterans' medical care. The buildup at DoD has also contributed to increases in the government's work force. Some of the professional occupations experiencing the largest increases--for example, engineers--are concentrated in that agency. Finally, the increasing reliance on contracting in government has raised the need for well-trained professionals to prepare and monitor contracts. In fact, the number of contract administrators has increased by about three-fifths over the past decade. Again, the Defense Department accounts for the greatest portion of that increase (about 85 percent). Overall, DoD accounts for about half the increase in professional, administrative, and technical jobs over the past decade. Most of that growth is attributable to the changing nature and complexity of the work at DoD rather than to the expansion of the department.

Educational Attainment

As the professionalism of the federal work force has increased, so has its level of educational attainment. As previously mentioned, about 31 percent of the federal civilian nonpostal work force has earned a bachelor's degree or better. In 1976, about 25 percent held such credentials (see Table 6). The trend toward higher educational attainment holds regardless of the occupational group considered. But, by far, the greatest gain occurred among professional and administrative jobs. The portion of professionals having earned at least a bachelor's degree grew from 85 percent to 88 percent over the past decade, an increase of about 64,000. For administrative personnel, 46 percent now hold a bachelor's degree or better, up from 41 percent in 1977, an increase of 72,000.

Length of Service

The average length of service of the full-time federal nonpostal work force has dropped somewhat. In 1976, the average executive branch employee had served 14.1 years; by 1985, average length of service had dropped to 13.5 years. This decline was driven in part by experi-

ence at DoD, where the hiring that accompanied the defense buildup helped push down the average length of service of that agency's work force from 15.8 years in 1976 to 13.8 years in 1985.

Several other factors may have contributed to the drop in length of service. Because the average figures reported here include time spent in the military, the decline in length of service may partly reflect the declining portion of veterans in the work force. The growing number of women in the federal work force has also contributed to the fall in length of service. Women generally have much higher turnover than

TABLE 6. FEDERAL CIVILIAN NONPOSTAL FULL-TIME PERMANENT WORK FORCE WITH A BACHELOR'S DEGREE OR BETTER, MARCH 1976 AND MARCH 1986

Group	Percent of Work Force With Bachelor's Degree or Better		Increase 1976-1986 (In thousands of workers)
	1976	1986	
White-Collar a/	32	38	153
Professional	85	88	64
Administrative	41	46	72
Technical, clerical	7	9	14
Blue-Collar	1	2	4
All Occupations b/	25	31	152

SOURCE: Congressional Budget Office from data provided by the Office of Personnel Management.

NOTE: Covers full-time permanent employment for all agencies but the U.S. Postal Service, the Tennessee Valley Authority, the Central Intelligence Agency, and certain other smaller agencies. Overseas employment included in the data is limited to U.S. citizens.

a. Includes workers in "other" white-collar occupations, a designation applied to guards, fire fighters, and similar jobs.

b. Includes workers in jobs for which an occupation was not specified when reported to the Office of Personnel Management. The number of such workers with a bachelor's degree or better fell by 5,000 between 1976 and 1986.

men and thus generally shorter careers. 8/ Women currently make up about 40 percent of all full-time nonpostal workers, up from about 35 percent a decade ago. Women hold a greater share of jobs in each occupational group, but expansion has been particularly strong in the professional, administrative, and technical jobs.

Finally, the overall drop in average federal service may also reflect recent increases in the rate at which employees retire. For 1986, the retirement rate for full-time civilian nonpostal workers stood at 3.1 percent, the highest rate since 1980 when changes in provisions of the retirement law encouraged many eligible senior employees to retire. (The retirement rate used here represents the number of retirements in a year divided by the average employment for the year.)

Retirements from the Senior Executive Service (SES) have also increased recently. The SES, established in 1979, covers managers and supervisors at the highest levels of the career civil service. For 1986, the rate of retirements from the SES stood at 6.1 percent, up from 4.6 percent in 1985 and 3.8 percent in 1981. Departures from the SES--that is, separations from government service for retirement and all other reasons-- averaged 10.2 percent for 1986. Although the SES is too small to affect overall statistics much, the recent increase in departures reinforces the widespread concerns about the government's ability to retain its executives. Senior civil servants provide government with an important source of experience, talent, and expertise. Should recent increases in retirement rates foretell some long-term trend, the government could eventually face problems in securing the good management necessary for the successful delivery of public services. 9/

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8. The most recent tabulations available show that turnover rates for women are about 50 percent higher than for men (based on 1984 data for full-time nonpostal workers in white-collar jobs; unpublished tabulations obtained from the Office of Personnel Management). Average length of service for women is about 25 percent shorter than for men (based on unpublished 1986 OPM data for nonpostal workers).

9. Two recent reports describe trends in departures from the Senior Executive Service and examine the reasons why senior civil servants leave government service. See General Accounting Office, *Senior Executive Service: Reasons Why Career Members Left in Fiscal Year 1985* (August 1987); and James P. McGrath, *The Senior Executive Service (SES): Morale and Staffing Problems--A Brief Overview* (Congressional Research Service, August 1987).

CHAPTER III

WHAT WORKERS DO AND HOW WELL THEY DO IT

The tasks to which the government devotes its vast army of professionals and other workers are varied. Moreover, data on the productivity of the work force suggests that, on the whole, they perform rather well.

THE NATURE OF FEDERAL WORK

One way to answer questions about what federal workers do is to look at the federal activities to which their talents are committed. To this end, the Congressional Budget Office distributed the federal civilian work force, measured on a full-time equivalent basis, among about a dozen broadly defined categories representing different federal responsibilities such as managing natural resources and delivering the mail. Figure 2 summarizes the results of this analysis.

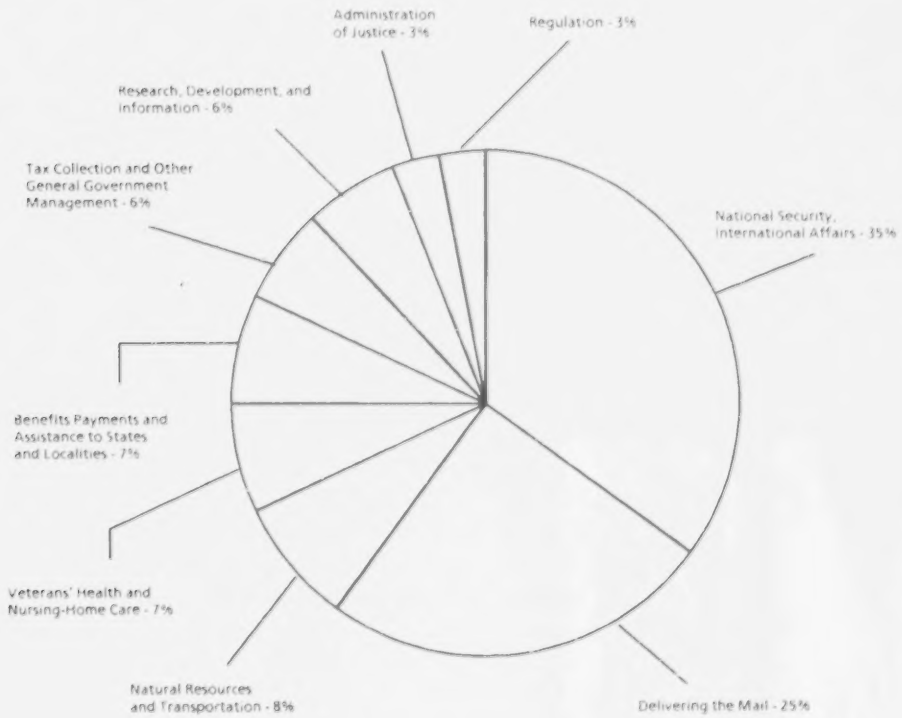
About 60 percent of the federal work force--roughly 1.8 million workers--is engaged in providing for the national defense (35 percent) and delivering the mail (25 percent). Most of the remainder of the work force divides, about equally, among five different activities--natural resources and transportation management (8 percent); provision of health care to veterans (7 percent); administration of benefit payments and assistance to states and localities (7 percent); tax collection and other general government activities (6 percent); and research, development, and information activities (6 percent).

Natural Resources and Transportation

About 230,000 workers are employed by government to manage lands and natural resources and to administer federal transportation activities (not including those activities involving grants). These

workers care for national parks and forests, keep rivers navigable, operate public utilities, and direct air traffic. Four agencies employ about four-fifths of these workers--the Department of Agriculture (24 percent), the Department of Transportation (22 percent), the Department of the Interior (19 percent), and the Tennessee Valley Authority (17 percent).

Figure 2.
Distribution of the Federal Civilian Work Force by Activity, 1986
(Three million full-time equivalent workers)


Administration of Justice - 3%
Regulation - 3%
Research, Development, and Information - 6%
Tax Collection and Other General Government Management - 6%
National Security, International Affairs - 35%
Benefits Payments and Assistance to States and Localities - 7%
Veterans' Health and Nursing-Home Care - 7%
Natural Resources and Transportation - 8%
Delivering the Mail - 25%

SOURCE: Congressional Budget Office from budget documents prepared by the Office of Management and Budget.

NOTE: Figure covers full-time equivalent employment, including the full-time equivalent of holiday and overtime hours. All agencies are represented except the Central Intelligence Agency and other intelligence-gathering organizations.

Benefit Payments and Grants

The government requires about 200,000 workers to see that citizens receive their Social Security checks, that the health and other needs of Native Americans are provided for, and that war veterans receive the benefits to which they are entitled. Also included here are those federal employees who administer housing, transportation, job training, and other programs that assist states and localities. One department--Health and Human Services--employs about half the workers engaged in these benefit and grant activities.

Other Major Activities

About 200,000 federal workers are needed to provide health and nursing-home care to war veterans. Another 185,000 collect taxes and support other general management activity such as administering employee pay and benefits, maintaining public buildings and grounds, supporting legislators and federal judges, and managing the government's finances. Research and information activities of government also involve many workers. These employees support research and development for agriculture, space, health, safety, and defense. They also manage national libraries and conduct the census. Four agencies employ about two-thirds of the more than 165,000 workers committed to research and information activities--the Department of Defense, the National Aeronautics and Space Administration, the Department of Health and Human Services, and the Department of Commerce.

HOW WELL FEDERAL WORKERS DO THEIR JOBS

Productivity, meaning the relationship between the product or service generated by an operation and one or more of the associated resources used in production, is one measure of how well workers do their jobs. (See the accompanying box for a description of productivity measurement in government.) Productivity improvement has been a goal of successive administrations. In February 1986, President Reagan launched a new drive to increase federal productivity in selected

activities by 20 percent over six years. 1/ The goal, which is to be achieved without a loss in quality of service, translates to annual growth rates averaging about 3 percent through 1992. By 1992, the Office of Management and Budget plans to expand greatly the number of jobs covered by the program, which now total about 500,000. Agencies have identified over 100 selected programs for productivity improvement through 1988. For example, the Veterans Administration plans, among other things, to reduce the overhead costs of its warehousing and distribution activities by consolidating certain medical storage facilities, and the Internal Revenue Service intends to improve the efficiency of its processing of tax returns and other activities through automation.

Although information about the success of the Administration's new program is still limited, information about the increases in productivity otherwise achieved by federal agencies is available from the extensive data system maintained by the Bureau of Labor Statistics (BLS). As described in the accompanying box, the BLS system, in operation since 1970, measures the product or service produced per worker. The specific contribution to output of nonlabor resources such as plant and equipment is not considered. 2/

According to the BLS, the labor productivity of the sampled federal civilian work force increased at an average annual rate of 1.4 percent from 1977 through 1986 (see Table 7). This annual growth exceeds by about 0.6 percentage points that experienced by the private nonfarm business sector for the same period. (This private-sector group is commonly compared with the federal work force, and is a group for which appropriate data are available.) A slightly lower rate

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1. Executive Order 12552, issued February 25, 1986, establishes the current federal productivity improvement initiative. Bettering federal productivity is a key element of the President's "Reform 88." The Administration is also pushing for adoption of legislation that would establish a federal "shared savings plan" that would allow employees and agencies to share a portion of the savings achieved from improved productivity. Such plans are intended as an incentive to agencies and employees to improve efficiency.

2. In addition to the 2.1 million civilian jobs included in the data base, the BLS system covers the work of several hundred thousand military personnel. No system for reporting productivity can cover all jobs because of the variety of federal activities and the difficulty of quantifying services--a major product of government. For further discussion of limitations associated with measuring federal productivity, see the statement by Alice M. Rivlin, Director, Congressional Budget Office, before the House Budget Committee, Washington, D.C., February 14, 1978; and Bureau of Labor Statistics, *Handbook of Methods*, "Productivity Measures: Industries and the Federal Government" (December 1982), pp. 101-108.

of productivity growth, averaging 1.2 percent, was experienced by the USPS and the DoD. Productivity at DoD has actually declined in

BOX 2

MEASURING PRODUCTIVITY IN THE FEDERAL GOVERNMENT

Productivity refers to the efficiency with which resources are used in a given operation. More specifically, it refers to the amount produced per unit of the resources used during production. Productivity is measured in different ways. Currently, two systems figure prominently in monitoring the productivity of the federal government.

The first system, maintained by the Bureau of Labor Statistics (BLS) since 1970, monitors changes in labor productivity--that is, changes in the ratio of the quantity of services provided to the quantity of labor required to produce them. The BLS collects data from 60 agencies on work performed by the equivalent of 2.1 million civilian employees. This sample represents 68 percent of the federal civilian work force. (Coverage is 41 percent at the Department of Defense, 100 percent at the U.S. Postal Service, and 73 percent for nondefense, nonpostal agencies as a group.) Data on labor resources and outputs is collected for more than 2,100 individual activities. For example, central procurement service at the Department of the Navy is measured by two activities--the number of procurement requisitions processed and the number of contracts awarded. The BLS aggregates the results into 28 broad functional categories such as medical services, finance and accounting, and military base support. For these categories, indexes are prepared that show how much more or less federal workers produce over time. The information is collected annually but is not available until about a year after the end of the period covered.

A second system for monitoring productivity, initiated last year by the Administration, uses a more comprehensive measure that considers labor along with capital and other resources involved in production. This "multifactor" approach produces ratios that relate output to the inflation-adjusted cost of all the resources used in production. For example, the productivity of IRS tax fraud investigation is measured as the unit cost of each investigation completed.

This multifactor monitoring system, coordinated by the Office of Management and Budget, operates on a largely decentralized basis. It currently covers fewer agencies than the BLS--the equivalent of around 500,000 jobs reported by 20 departments and agencies, excluding the Postal Service. It further contrasts with the BLS system in that it monitors productivity quarterly rather than annually, considers measures of service quality, and integrates the data on outputs and resources with management and budget review processes. The individual activities currently covered by the two systems, however, are not mutually exclusive. Some of the activities in the new multifactor system are included in the BLS system--though they are not always reported in the same manner--and some are unique to the new initiative.

TABLE 7. AVERAGE ANNUAL PRODUCTIVITY CHANGES SINCE 1977, BY FEDERAL AGENCY

	1977-1982	1982-1986	1977-1986
Department of Defense	2.5	-0.5	1.2
U.S. Postal Service	1.3	1.1	1.2
Other Covered Agencies	1.4	2.2	2.0
Total	1.7	0.9	1.4

SOURCE: Congressional Budget Office from data provided by the Bureau of Labor Statistics.

NOTE: The productivity data prepared by BLS use information on the number of hours worked per year, regardless of the type of civil service appointment covering a job. The averages are based on a linear least squares trend. Detailed information on productivity trends since 1967 for 28 broad functional categories is available in the most recent BLS report, *Federal Government Productivity Summary Data: Fiscal Years 1967-1986* (1987).

three of the last four years, in part because resources increased faster than work load. Other factors contributing to the declines include the increased emphasis on improving the quality of certain defense capabilities and the inexperience of new workers. For the remaining civilian agencies as a group, annual productivity growth of covered activities has been remarkably strong, averaging 2 percent through 1986.

In view of past experience, the Administration's goal of 3 percent annual improvement in productivity may prove too ambitious. The aggregate averages of BLS data presented here, however, mask the fact that for more than half a dozen functions, average productivity growth since 1977 has met or well exceeded the Administration's target. Nevertheless, agencies may find it difficult to replicate such performance. The "multifactor" productivity measurement adopted for the program often shows less improvement for the same effort--because capital investment costs are included--than measures, such as those employed by BLS, that consider only labor resources. 3/ As time

3. At the U.S. Postal Service--the only large agency where productivity has been monitored for a number of years using both measures--the multifactor system shows practically no sustained productivity improvement since 1977, while the BLS system that measures only labor shows productivity growth of 1.2 percent over the same period.

passes, moreover, agencies may exhaust their inventory of activities offering the best opportunities for productivity growth, making targeted growth rates hard to sustain.

Whatever the outcome of the Administration's efforts, the fact remains that productivity is only one aspect of doing a job well. Productivity data reveal nothing, for example, about the quality or timeliness of services delivered by federal agencies. Nor can they identify changes in the composition of programmatic outputs. Productivity data also reveal nothing about a program's effectiveness. Productivity gains in processing grants to states and local governments, for example, are no indication of the extent to which program objectives like job training or economic development are being achieved.

Even as an indicator of efficiency, however, the BLS data have limitations. Productivity measures may sometimes be distorted by inaccuracies in raw data. Also, under current practices, productivity reports are not available on a timely basis. These limitations make BLS data difficult for agency managers to use in making decisions at the program level. As an overall barometer, however, BLS data provide a fair assessment of how efficiently resources are used. In this context, the BLS data show that efficiency that improves over time is not uncharacteristic of government. Such improvement, moreover, has a payoff for taxpayers. Overall productivity gains achieved since 1977 suggest that federal agencies have been able to get by with about 270,000 fewer civilian workers than might otherwise have been needed. These employment savings represent 13.2 percent of the civilian work force measured by the BLS reporting system.

APPENDIX

TABLE A-1. GROWTH OF THE FEDERAL CIVILIAN WORK FORCE BY BRANCH AND AGENCY, 1977-1987
(In thousands of workers)

Branch, Department, Agency	Number of Workers					
	1977	1978	1979	1980	1981	1982
Legislative Branch	39.3	39.9	39.6	40.1	39.5	39.3
Judicial Branch	12.3	12.9	13.3	14.4	15.3	15.7
Executive Branch	2,802.9	2,822.2	2,843.7	2,932.9	2,854.7	2,816.2
Executive Departments	1,723.5	1,736.6	1,745.8	1,820.4	1,744.6	1,724.6
State	30.1	30.2	30.1	23.6	23.6	24.0
Treasury	127.1	129.1	129.2	130.7	128.9	122.3
Defense b/	996.6	987.0	973.8	970.6	986.3	1,019.3
Justice	53.3	54.1	55.1	56.3	56.1	55.4
Interior	81.9	79.0	81.8	83.0	81.7	78.3
Agriculture	129.6	125.3	126.0	128.8	127.9	120.3
Commerce	38.6	39.8	48.4	124.8	45.1	35.3
Labor	16.7	19.8	23.8	23.9	22.7	19.5
Health and Human Services	157.3	159.6	164.7	163.6	157.8	149.4
Housing and Urban Development	17.1	17.9	18.6	17.4	16.5	14.9
Transportation	75.2	75.0	74.0	73.4	69.7	61.5
Energy	n.a.	19.8	20.3	21.3	21.2	18.6
Education	n.a.	n.a.	n.a.	3.0	7.1	5.8
Independent Agencies	1,079.4	1,085.6	1,097.9	1,112.5	1,110.1	1,091.6
General Services Administration	37.1	38.0	38.3	38.0	36.3	31.8
Veterans Administration	222.7	231.3	228.5	234.1	233.0	235.1
Postal Service	660.5	653.3	661.2	663.1	663.6	665.6
All other	159.1	163.0	169.9	177.3	177.2	159.1
Total	2,854.5	2,874.9	2,896.7	2,987.4	2,909.5	2,871.2

SOURCE: Congressional Budget Office from data provided by the Office of Personnel Management.

NOTE: Data are averages of monthly employment counts. Averages cover both permanent and temporary appointments, as well as full-time, part-time, and other work schedules. All geographic areas are represented, as are all agencies except the Central Intelligence Agency and other intelligence-gathering organizations.

n.a. = not applicable.

a. Covers the period from October 1986 through May 1987.

b. DoD's eight-month average for 1987 shows a small drop in employment from 1986, resulting in part from wide month-to-month fluctuations in the agency's reported employment. Preliminary estimates for the full fiscal year show average employment at about the 1986 level.

TABLE A-1 (Continued)

Branch, Department, Agency	Number of Workers					Change 1977-1987	
	1983	1984	1985	1986	1987 a/	Number	Percent
Legislative Branch	39.4	39.6	39.4	37.8	37.0	-2.3	-5.9
Judicial Branch	16.2	16.8	17.6	18.6	19.2	6.9	56.1
Executive Branch	2,822.6	2,854.9	2,944.4	2,990.3	2,994.1	191.2	6.8
Executive Departments	1,740.1	1,759.6	1,786.8	1,788.1	1,765.7	42.2	2.4
State	24.0	24.4	25.1	25.7	25.3	4.8	15.9
Treasury	124.5	129.8	134.7	138.3	146.0	18.9	14.9
Defense b/	1,033.3	1,052.4	1,080.3	1,088.5	1,072.5	75.9	7.6
Justice	57.6	60.3	62.9	65.3	66.5	13.2	24.8
Interior	78.3	77.1	76.2	74.2	70.5	-11.4	-13.9
Agriculture	117.8	117.5	115.4	111.2	107.3	-22.3	-17.2
Commerce	35.6	35.1	35.5	35.1	34.2	-4.4	-11.4
Labor	19.3	18.6	18.3	18.0	17.6	0.9	5.4
Health and Human Services	149.5	146.6	141.8	136.9	130.9	-26.4	-16.8
Housing and Urban Development	14.1	12.7	12.3	11.9	12.3	-4.8	-28.1
Transportation	63.0	62.6	62.4	61.6	61.5	-13.7	-18.2
Energy	17.5	17.2	16.8	16.7	16.6	c/	c/
Education	5.6	5.3	5.1	4.7	4.5	d/	d/
Independent Agencies	1,082.5	1,095.3	1,157.6	1,202.2	1,228.4	149.0	13.8
General Services Administration	30.1	29.7	27.7	24.9	22.0	-15.1 e/	-40.7
Veterans Administration	237.7	240.5	244.7	243.8	243.2	20.5	9.2
Postal Service	663.8	676.6	733.9	782.7	811.0	150.5	22.8
All other	150.9	148.5	151.3	150.8	152.2	-6.9	-4.3
Total	2,878.3	2,911.3	3,001.4	3,046.7	3,050.3	195.8	6.9

c. The Department of Energy was established by the Department of Energy Organization Act, approved in August 1977. The decrease in employment for the period 1978-1987 totaled 3,200, or 16.2 percent.

d. The Department of Education was established by the Department of Education Organization Act, approved in October 1979. The increase in employment for the period 1980-1987 totaled 1,500, or 50.0 percent.

e. A significant portion of the decrease in employment at the General Services Administration reflects the transfer of certain activities, once performed by the agency, to other independent agencies. Preparedness activities were transferred to the Federal Emergency Management Agency, established pursuant to Reorganization Plan No. 3 of 1978. Archives and records functions were transferred to the National Archives and Records Administration, established by the National Archives and Records Administration Act of 1984.

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